

- 39 -

SEQUENCE LISTING

Seq. ID No.1

5'- 1 GATCCAATA AACCCGATGG AACCCCGCGC AAACCTATTGG ACGTCTCCGC GCTACGCAGT
61 TGGGTTGGCG CCCGCGAATC GCACTGAAAG AGGGCATCGA TGCAACGGTG TCGTGGTACC
121 GCACAAATGC CGATGCCGTG AGGAGGTAAA GCTGCGGGCC GGCCGATGTT ATCCCTCCGG
181 CCGGACGGGT AGGGCGACCT GCCATCGAGT GGTACGGCAG TCGCTGGCC GGCGAGGCGC
241 ATGGCCTATG TGAGTATCCC ATAGCCTGGC TTGGCTCGCC CCTACGCATT ATCAGTTGAC
301 CGCTTTCGCG CCACGTCGCA GGCTTGCAGC AGCATCCCGT TCAGGTCTCC TCATGGTCCG
361 GTGTGGCAGC ACCACGCAAG CTCGAACCGA CTCGTTTCCC AATTTCGCAT GCTAATATCG
421 CTCGATGGAT TTTTTCGCA ACGCCGGCTT GATGGCTCGT AACGTTAGCA CCGAGATGCT
481 GCGCCACTCC GAACGAAAGC GCCTATTAGT AAACCAAGTC GAAGCATACG GAGTCAACGT
541 TGTTATTGAT GTCGGTGCTA ACTCCGGCCA GTTCGGTAGC GCTTTGCGTC GTGCAGGATT
601 CAAGAGCCGT ATCGTTTCCT TTGAACCTCT TTCGGGGCCA TTTGCGCAAC TAACGCGCAA
661 GTCGGCATCG GATC -3'

Seq. ID No.2

5'- 1 GATCCGATGC CGACTTGCGC GTTAGTTGCG CAAATGGCCC CGAAAGAGGT TCAAAGGAAA
61 CGATACGGCT CTTGAATCCT GCACGACGCA AAGCGCTACC GAACTGGCCG GAGTTAGCAC
121 CGACATCAAT AACCAACGTTG ACTCCGTATG CTTGCACTTG GTTTACTAAT AGGCGCTTTC
181 GTTCGGAGTG GCGCAGCATC TCGGTGCTAA CGTTACGAGC CATCAAGCCG GCGTTGCGCA
241 AAAAATCCAT CGAGCGATAT TAGCATGCGA AATTGGGAAA CGAGTCGGTT CGAGCTTGCG
301 TGGTCGTGCC ACACCGGACC ATGAGGAGAC CTGAACGGGA TGCTGCCGCA AGCCTGCGAC
361 GTGGCGCGAA AGCGGTCAAC TGATAATGCG TAGGGGCGAG CCAAGCCAGG CTATGGGATA
421 CTCACATAGG CCATGCGCCT CGCCGGCCAG GCGACTGCCG TACCACTCGA TGGCAGGTCG
481 CCTTACCCGT CCGGCCGGAG GGATAACATC GGCCGGCCCG CAGCTTTACC TCCTCACGGC
541 ATCGGCATTT GTGCGGTACC ACGACACCGT TGCATCGATG CCCTCTTTCA GTGCGATTCT
601 CGGGCGCCAA CCCAACTGCG TAGCGCGGAG ACGTCCAATA GTTTGCGCGG GGTTCATCG
661 GGTTTAGTTG GATC -3'

- 40 -

Seq. ID No.3

1 GAATTCCTGGG TTGGAGACGA CGTCGAACTC CTGGTCGGTC TTGCTTCGAA
51 TGATCGCTGT GATCTGGTCG GCGGTGCCGA CAGGAACCGT CGACTTGTCTG
101 ACGATCACCT TGTACCGGTC GATGTATGAC CCAATGTCGT CCGCAACCGA
5 151 GAAGACGTAC GTCAGGTCCG CCGCCCCGCT TTCACCCATG GCGTCGGGA
201 CCGCGATGAA AATGACGTCC GCGTGCTCGA TTCGCGTTG CCGGTCCGTG
251 GTGAAGTCAA TCAGCCCCTT CTCACGGTTC CTCGCAATCA ACTCCCAACC
301 CGGGCTCGAA AATCGGGACA CTCCTGCGA GGAGCAAATC GATCTTGGCC
351 TGATCGATAT CGACACAGAC GACATCGTTG CCGCTATCCG CGAGACAGGC
10 401 GCCCGTGACG AGGCCTACAT AGCCTGATCC GACCACCGAA ATTTTCAAGA
451 TGACCCCTTC AAGTCCCCGA TCGGTGACG ACCATACTGC CGCAACTCTG
501 TACCTCCGT GGGTAATTCT CATGTGCGT TCGTAAGGAG CAGCCAGCGA
551 GTCGGGGACG TTCGTGAGA GAGTCGCAGG ACTACGAGGT TGCCGGTGCG
601 ATACATCACA GTGTTGCGTC TGTGGCAAC GATGCAGCAA GAACCCACGG
15 651 GGCAGCCCTG AACTGCGCGC ATGACCGGTC CTGTCTCTGG CACCTTTGAT
701 CGGCCACCGC TTCCATGCGA ACATGACCGG AATCCATAGC GCGTGGTCAA
751 GCAGCGGGGA GGTAGACGTC GGTGTCATCT GCTCCAACCG TGTCGGTGAT
801 AACGATTTCTG CTGAACGATC TCGAGGGATT GAAAAGCACC GTGGAGAGCG
851 TTCGCGCGCA GCGCTATGGG GGGCGAATCG AGCACATCGT CATCGACGGT
20 901 GGATCGGGCG ACGCCGTCTG GGAGTATCTG TCCGGCGATC CTGGCTTTGC
951 ATATTGGCAA TCTCAGCCCG ACAACGGGAG ATATGACGCG ATGAATCAGG
1001 GCATTGCCCA TTCGTGGGC GACCTGTTGT GGTATTATGCA CTCCACGGAT
1051 CGTTTCTCCG ATCCAGATGC AGTCGCTTCC GTGGTGGAGG CGCTCTCGGG
1101 GCATGGACCA GTACGTGATT TGTGGGGTTA CGGGAAAAAC AACCTTGTCTG
25 1151 GACTCGACGG CAAACCACTT TTCCCTCGGC CGTACGGCTA TATGCCGTTT
1201 AAGATGCGGA AATTTCTGCT CCGCGCGACG GTTGCATC AGGCGACATT
1251 CTTGCGCGCG TCGTGGTAG CCAAGTTGGG CGGTTACGAT CTTGATTTTG
1301 GACTCGAGGC GGACAGCTG TTCATCTACC GTGCCGCACT AATACGGCCT
1351 CCCGTACGA TCGACCGGT GGTGTCGAC TTCGATGTCA CCGGACCTGG
30 1401 TTCAACCCAG CCCATCCGTG AGCACTATCG GACCTGCGG CCGCTCTGGG
1451 ACCTGCATGG CGACTACCCG CTGGGTGGGC GCAGAGTGTC GTGGGCTTAC
1501 TTGCGTGTGA AGGAGTACTT GATTCGGGCC GACCTGGCCG CATTCAACGC
1551 GGTAAAGTTC TTGCGAGCGA AGTTCGCCAG AGCTTCGCGG AAGCAAAATT
1601 CATAGAAACC AACTTCTACT GCCTGACCTG AGCAGCGCCG AGGCGCGCAG
35 1651 CCGCATCAGT GCGACCTGAA CGGCCAGGTG GAAAGCGCCA CCGATCCCGG
1701 CACCGAGTGC CTGACGCTTC GGATCCCTTG CACCACAACG AGAGTGAGAG
1751 CGCCATGATG AGGAAATATC GGCTGGGCGG AGTCAACGCC GGAGTGACAA
1801 AAGTGAGAAC CCGGTGAAGC GAGCGCTTAT AACAGGGATC ACGGGGCAGG
1851 ATGGTTCCCTA CCTCGCCGAG CTACTACTGA GCAAGGGATA CGAGGTTTAC
40 1901 GGGCTCGTTC GTCGAGCTTC GACGTTTAAC ACGTCGCGGA TCGATCACCT
1951 CTACGTTGAC CCACACCAAC CCGGCGCGCG CTTGTTCTTG CACTATGCAG
2001 ACCTCACTGA CGGCACCCGG TTGGTGACCC TGCTCAGCAG TATCGACCCG
2051 GATGAGGTCT ACAACCTCGC AGCGCAGTCC CATGTGCGCG TCAGCTTTGA
2101 CGAGCCAGTG CATAACCGAG ACACCACCGG CATGGGATCG ATCCGACTTC
45 2151 TGGAAGCAGT CCGCCTTTCT CGGGTGGACT GCCGGTTCTA TCAGGCTTCC
2201 TCGTCGGAGA TGTTCGGCGC ATCTCCGCCA CCGCAGAACG AATCGACGCC
2251 GTTCTATCCC CGTTCGCCAT ACGGCGCGGC CAAGGTCTTC TCGTACTGGA
2301 CGACTCGCAA CTATCGAGAG GCGTACGGAT TATTCGAGT GAATGGCATC
2351 TTGTTCAACC ATGAGTCCCC CCGGCGCGGC GAGACTTTCTG TGACCCGAAA
50 2401 GATCACGCGT GCCGTGGCGC GCATCCGAGC TGGCGTCCAA TCGGAGGTCT
2451 ATATGGGCAA CCTCGATGCG ATCCGCGACT GGGGCTACGC GCCCGAATAT
2501 GTCGAGGGGA TGTGGAGGAT GTTGCAAGCG CCTGAACCTG ATGACTACGT

- 41 -

5
10
15
20
25
30
35
40
45
50

2551 CCTGGCGACA GGGCGTGGTT ACACCGTACG TGAGTTCGCT CAAGCTGCTT
2601 TTGACCATGT CCGGCTCGAC TGGCAAAAGC GCGTCAAGTT TGACGACCGC
2651 TATTTGCGTC CCACCGAGGT CGATTGCTA GTAGGAGATG CCGACAAGGC
2701 GGCCCAAGTCA CTCGGCTGGA AAGCTTCGGT TCATACTGGT GAACTCGCGC
2751 GCATCATGGT GGACGCGGAC ATCGCCGCGT TGGAGTGC GA TGGCACACCA
2801 TGGATCGACA CGCCGATGTT GCCTGGTTGG GGCAGAGTAA GTTGACGACT
2851 ACACCTGGGC CTCTGGACCG CGCAACGCCC GTGTATATCG CCGGTCATCG
2901 GGGGCTGGTC GGCTCAGCGC TCGTACGTAG ATTTGAGGCC GAGGGGTTCA
2951 CCAATCTCAT TGTGCGATCA CGCGATGAGA TTGATCTGAC GGACCGAGCC
3001 GCAACGTTTG ATTTTGTGTC TGAGACAAGA CCACAGGTGA TCATCGATGC
3051 GGCCGCAAGG GTCGGCGGCA TCATGGCGAA TAACACCTAT CCCGCGGACT
3101 TCTTGTCCGA AAACCTCCGA ATCCAGACCA ATTTGCTCGA CGCAGCTGTC
3151 GCCGTGCGTG TGCCGCGGCT CCTTTTCCTC GGTTTCGTCAT GCATCTACCC
3201 GAAGTACGCT CCGCAACCTA TCCACGAGAG TGCTTTATTG ACTGGCCCTT
3251 TGGAGCCAC CAACGACGCG TATGCGATCG CCAAGATCGC CCGTATCCTG
3301 CAAGTTCAGG CGGTTAGGCG CCAATATGGG CTGGCGTGGA TCTCTGCGAT
3351 GCCGACTAAC CTCTACGGAC CCGGCGACAA CTCTCCCCG TCCGGGTCGC
3401 ATCTCTTGCC GCGCTCATC CGTCGATATG AGGAAGCCAA AGCTGGTGGT
3451 GCAGAAGAGG TGACGAATTG GGGGACCGGT ACTCCGCGGC GCGAACTTCT
3501 GCATGTCGAC GATCTGGCGA GCGCATGCCT GTTCTTTTG GAACATTTG
3551 ATGGTCCGAA CCACGTCAAC GTGGGCACCG GCGTCGATCA CAGCATTAGC
3601 GAGATCGCAG ACATGGTCGC TACAGCGGTG GGCTACATCG GCGAAACAGC
3651 TTGGGATCCA ACTAAACCCG ATGGAACCCC GCGCAAATA TTGGACGTCT
3701 CCGCGCTACG CGAGTTGGGT TGGCGCCCGC GAATCGCACT GAAAGACGGC
3751 ATCGATGCAA CGGTGTCGTG GTACCGCACA AATGCCGATG CCGTGAGGAG
3801 GTAAAGCTGC GGGTCGGCCG ATGTTATCCC TCCGGCCGGA CGGGTGGGGC
3851 GACCTGCCGT CGAGTGTAC GGCAGTCGCC TGGCCGCGA GGCGCGTGGC
3901 CTATGGGAGT ATCCAATAGC CTGGCTTGGC TCGCCCCTAC GCATTATCAG
3951 TTGACCGCTT TCGCGCCAGC TCGCAGGCTT GCGGCAGCAT CCGGTTTCAGG
4001 TCTCCTCATG GTCCGGTGTG GCACGACCAC GCAAGCTCGA ACCGACTCGT
4051 TTCCCAATTT CGCATGCTAA TATCGCTCGA TGGATTTTTT GCGCAACGCC
4101 GGCTTGATGG CTCGTAACGT TAGTACCGAG ATGCTGCGCC ACTTCGAACG
4151 AAAGCGCCTA TTAGTAAACC AATTCAAAGC ATACGGAGTC AACGTTGTTA
4201 TTGATGTCGG TGCTAACTCC GGCCAGTTCG GTAGCGCTTT GCGTCGTGCA
4251 GGATTCAAGA GCCGTATCGT TTCCTTTGAA CCTCTTTCGG GGCCATTTGC
4301 GCAACTAACG CGCAAGTCGG CATCGGATCC ACTATGGGAG TGTCAACAGT
4351 ATGCCCTAGG CGACGCCGAT GAGACGATTA CCATCAATGT GGCAGGCAAT
4401 GCGGGGGCAA GTAGTTCGGT GCTGCCGATG CTTAAAAGTC ATCAAGATGC
4451 CTTTCCTCCC GCGAATTATA TTGGCACCGA AGACGTTGCA ATACACCGCC
4501 TTGATTCGGT TGCATCAGAA TTTCTGAACC CTACCGATGT TACTTTCCTG
4551 AAGATCGACG TACAGGGTTT CGAGAAGCAG GTTATCACGG GCAGTAAGTC
4601 AACGCTTAAC GAAAGCTGCG TCGGCATGCA ACTCGAACTT TCTTTTATTC
4651 CGTTGTACGA AGGTGACATG CTGATTCATG AAGCGCTTGA ACTTGTCTAT
4701 TCCCTAGGTT TCAGACTGAC GGGTTTGTG CCCGCTTTA CCGATCCGCG
4751 CAATGGTCGA ATGCTTCAAG CTGACGGCAT TTTCTTCCGT GGGGACGATT
4801 GACATAAATG CTCCGTCGGC ACCCTGCCGG TATCCAAACG GGCGATCTGG
4851 TGAGCCGGCC TCCCGGGCAC CTAATCGACT ATCTAAATTG AGGCGGCCGC
4901 GACGTGCGGC ACGAACAGGT GGCCGGCTGC TAGCGTTACA CACGTCATGA
4951 CTGCGCCAGT GTTCTCGATA ATTATCCCTA CCTTCAATGC AGCGGTGACG
5001 CTGCAAGCCT GCCTCGGAAG CATCGTCGGG CAGACCTACC GGGAAAGTGA
5051 AGTGGTCCTT GTCGACGGCG GTTCGACCGA TCGGACCCTC GACATCGCGA
5101 ACAGTTTCCG CCCGGAATC GGCTCGCGAC TGGTCGTTCA CAGCGGGCCC
5151 GATGATGGCC CCTACGACGC CATGAACCGC GGCGTCGGCG TGGCCACAGG

- 42 -

5201 CGAATGGGTA CTTTTTTTAG GCGCCGACGA CACCCTCTAC GAACCAACCA
5251 CGTTGGCCCA GGTAGCCGCT TTTCTCGGCG ACCATGCGGC AAGCCATCTT
5301 GTCTATGGCG ATGTTGTGAT GCGTTCGACG AAAAGCCGGC ATGCCGGACC
5351 TTTCGACCTC GACCGCCTCC TATTTGAGAC GAATTTGTGC CACCAATCGA
5401 TCTTTTACCG CCGTGAGCTT TTCGACGGCA TCGGCCCTTA CAACCTGCGC
5451 TACCGAGTCT GGGCGGACTG GGACTTCAAT ATTCGCTGCT TCTCCAACCC
5501 GGCCTGATT ACCCGCTACA TGGACGTCGT GATTTCCGAA TACAACGACA
5551 TGACCGGCTT CAGCATGAGG CAGGGGACTG ATAAAGAGTT CAGAAAACGG
5601 CTGCCAATGT ACTTCTGGGT TGCAGGGTGG GAGACTTGCA GGCGCATGCT
5651 GGCGTTTGTG AAAGACAAGG AGAATCGCCG TCTGGCCTTG CGTACGCGGT
5701 TGATAAGGGT TAAGGCCGTC TCCAAAGAAC GAAGCGCAGA ACCGTAGTCG
5751 CGGATCCACA TTGGACTTCT TTAACGCGTT TCGCTCCTGA TCCACCTTTC
5801 AAGCCCGTTC CGCGTAACGC GCGCGCAGAG GAGTGGTCGC ATATCGCATC
5851 ACTGTTCTCG TGCCAGTGCT TGGAAAGCGT CGAGCACTCT GGTTCGCGTT
5901 CTTGACGTTT GCGCCCGCTC CTAGAGGTAG CGTGTCAAGT GACTGAAGCC
5951 AATGAGTGCA ACTCGCGCTC GCGAAAGGTT TCAGTCGCGG TTGAGCAAGA
6001 CACCGCAAGA CTA CTGAGT GCGTGACAA GCGCCTCCAG CTCGCGGCTG
6051 AAAGCGGATG CAAAGGGATT CGAAGCTTGA GCAACATGCG AAGGGGAGAA
6101 CGGCCTATGA GGCTGGGACA GGTTTTCGAT CCGCGCGCGA ATGCACTGTC
6151 AATGGCCAAG TAGAAGTCCC CGCTGGTGGC CAGCAGAAGT CCCCCTCCG
6201 CTGCGGGTGG TTGGCTAATT CTTGGCGGCT CCCTTCTTGT GGTGCGCGTG
6251 GCGCATCCGG TAGGACTCGC CGGAGGTGAC GACGATGCTG GCGTGGTGCA
6301 GCAGCCGATC GAGGATGCTG GCGGCGGTGG TGTGCTCGGG CAGGAATCGC
6351 CCCCATTGTT CGAAGGGCCA ATGCGAGGCG ATGGCCAGGG AGCGGCGCTC
6401 GTAGCCGGCA GCCACGAGCC GGAACAACAG TTGAGTCCCG GTGTCGTCTGA
6451 GCGGGGCGAA GCCGATCTCG TCCAAGATGA CCAGATCCGC GCGGAGCAGG
6501 GTGTCGATGA TCTTGCCGAC GGTGTTGTCTG GCCAGGCCGC GGTAGAGGAC
6551 CTCGATCAGG TCGGCGGCGG TGAAGTAGCG GACTTTGAAT CCGGCGTGGA
6601 CGGCAGCGTG CCCGAGCCG ATGAGCAGGT GACTTTTGCC CGTACCAGGT
6651 GGGCCAATGA CCGCCAGGTT CTGTTGTGCC CGAATCCATT CCAGGCTCGA
6701 CAGGTAGTCG AACGTGGCTG CCGTGATCGA CGATCCGGTG ACGTCGAACC
6751 CGTCGAGGGT CTTGGTGACC GGGAAAGGCTG CCGCCTTGAG ACGGTTGGCG
6801 GTGTTGGAGG CATCGCGGGC AGCGATCTCG GCCTCAACCA ACGTCCGAG
6851 GATCTCCTCC GGTGTCCAGC GTTGCGTCTT GCGGACTTGC AACACCTCGG
6901 CCGCGTTGCG GCGCACCCTG GCCAGCTTCA ACCGCCGAG CCGCGCTCA
6951 AGGTCAGCAG CCAGCGGTGC CGCCGAGGAC GGTGCCACCG GCTTGGCAGC
7001 GGTGGTCATG AGGCCGTCCC GTCGGTGGTG TTGATCTTGT AGGCCTCCAA
7051 CGAGCGGGTC TCGACGGTGG GCAGATCGAG CACGAGTGGC TCGCCGGCGG
7101 GCGGGGGTTG TGGGGTGCCG GCGCCGGCGG CCAGGATCGA GCGCACGTCTG
7151 GCAGCGCGGA ACCGGCGAAA CGCAACCGCC CCGCGCAGCG CGTCAATCAA
7201 AGCCTGTTCT CCGTGGGCGG CGCCAAGGCC GAGCAGAATG TCGAGTTCGG
7251 ATTTAGTCTG GGTGTTGCCG ATCGCAGCAG CACCGACGAG GAACTGCTGC
7301 GCTTCGGTTC CCAATGCGCA GAATCGTTTC TCTGCTTGGG TTTTCGGGCG
7351 AGGACCACGC GAGGGTGCGG GTCTGGGTCC GTCGTAGTGT TCATCGAGGA
7401 TGGACACCTC ACCTGGGCTG ACGAGCTCGT GCTCGGCCAC GATCACACCG
7451 GTCGCAAGTT CCAACAGGAT CAGGGCGCCA TGATCGACCA CCACCGCCAC
7501 GGTGGCACCG ACGAGCCGCT GAGGCACCGA GTAACGAGCT GAGCCGTAAC
7551 GGATGCACGA GAGGCCGCTG ACCTTACGGC GCACCGACCC CGAGCCGATC
7601 GTCGGCCGCA GCGAGGGCAG CTCCTCAAG ACGGTGCGCT CGTCAACCAA
7651 GCGATCGTTG GGCACGGCGC AGATCTCCGA GTGGACCGTG GCATTGACCT
7701 CGGCGCACCA TAGTTGCGCC TGGGCGTTGA GGGCACGTAG GTCGACCTGC
7751 TCACCGGCTA ACGCAGCTTC GGTGAGCAGC GGCACCGCAA GGTGCTCCTG
7801 AGCGTAGCCA CAGAGGTTCT CCACGATGCC CTTGATTGCG GGATCCGCAC

Seq. ID No. 4

| | | | | | | | | |
|----|------|-------------|-------------|------------|-------------|------------|------------|------------|
| 5 | | 1 | TTCTACTGCC | TGACCTGAGC | AGCGCCGAGG | CGCGCAGCGC | GATCACTGCC | ACCTGAATGG |
| | 61 | CCAGGTGGAA | AGCGCCACCG | ATCCCGGCAC | CGAGTGCCTG | ACGATTCCGA | TCCCTTGCAC | |
| | 121 | CACAACGAGA | GTGAGACCGC | CATGATGACG | AAATATCGGC | TGGGCGGAGT | CAACGCCGGA | |
| | 181 | GTGACAAAAG | TGAGAACCCG | GTGAAGCGAG | CGCTTATAAC | AGGGATCACG | GGGCAGGATG | |
| | 241 | GTTCCTACCT | CGCCGAGCTA | CTACTGAGCA | AGGGATACGA | GGTTCACGGG | CTCGTTCGTC | |
| 10 | 301 | GAGCTTCGAC | GTTTAAACAG | TCGCGGATCG | ATCACCTCTA | CGTTGACCCA | CACCAACCCG | |
| | 361 | GCGCGCGCTT | GTTCTTGCAC | TATGCAGACC | TCACTGACGG | CACCCGGTTG | GTGACCCTGC | |
| | 421 | TCAGCAGTAT | CGACCCGGAT | GAGGTCTACA | ACCTCGCAGC | GCAGTCCCAT | GTGCGCGTCA | |
| | 481 | GCTTTGACGA | GCCAGTGCAT | ACCGGAGACA | CCACCGGCAT | GGGATCGATC | CGACTTCTGG | |
| | 541 | AAGCAGTCCG | CCTTTCTCGG | GTGGACTGCC | GGTTCTATCA | GGCTTCCTCG | TCGGAGATGT | |
| 15 | 601 | TCGGCGCATC | TCCGCCACCG | CAGAACGAAT | CGACGCCGTT | CTATCCCCGT | TCGCCATACG | |
| | 661 | GCGCGGCCAA | GGTCTTCTCG | TACTGGACGA | CTCGCAACTA | TCGAGAGGCG | TACGGATTAT | |
| | 721 | TCGCAGTGAA | TGGCATCTTG | TTCAACCATG | AGTCCCCCGG | GCGCGGCGAG | ACTTTCGTGA | |
| | 781 | CCCGAAAGAT | CACGCGTGCC | GTGGCGCGCA | TCCGAGCTGG | CGTCCAATCG | GAGGTCTATA | |
| | 841 | TGGGCAACCT | CGATGCGATC | CGCGACTGGG | GCTACGCGCC | CGAATATGTC | GAGGGGATGT | |
| 20 | 901 | GGAGGATGTT | GCAAGCGCCT | GAACCTGATG | ACTACGTCCT | GGCGACAGGG | CGTGGTTACA | |
| | 961 | CCGTACGTGA | GTTCTGCTCAA | GCTGCTTTTG | ACCACGTCGG | GCTCGACTGG | CAAAAGCACG | |
| | 1021 | TCAAGTTTGA | CGACCCTAT | TTGCGCCCCA | CCGAGGTCGA | TTCGCTAGTA | GGAGATGCCG | |
| | 1081 | ACAGGGCGGC | CCAGTCACTC | GGCTGGAAAG | CTTCGGTTCA | TACTGGTGAA | CTCGCGCGCA | |
| | 1141 | TCATGGTGGG | CGCGGACATC | GCCGCGTCGG | AGTGCGATGG | CACACCATGG | ATCGACACGC | |
| 25 | 1201 | CGATGTTGCC | TGGTTGGGGC | GGAGTAAGTT | GACGACTACA | CCTGGGCCTC | TGGACCGCGC | |
| | 1261 | AACGCCCCGTG | TATATCGCCG | GTATCGGGG | GCTGGTCGGC | TCAGCGCTCG | TACGTAGATT | |
| | 1321 | TGAGGCCGAG | GGGTTACCA | ATCTCATTTG | GCGATCACGC | GATGAGATTG | ATCTGACGGA | |
| | 1381 | CCGAGCCGCA | ACGTTTGATT | TTGTGTCTGA | GACAAGACCA | CAGGTGATCA | TCGATGCGGC | |
| | 1441 | CGCACGGGTC | GGCGGCATCA | TGGCGAATAA | CACCTATCCC | GCGGACTTCT | TGTCCGAAAA | |
| 30 | 1501 | CCTCCGAATC | CAGACCAATT | TGCTCGACGC | AGCTGTCGCC | GTGCGTGTGC | CGCGGCTCCT | |
| | 1561 | TTTCCTCGGT | TCGTATGCA | TCTACCCGAA | GTACGCTCCG | CAACCTATCC | ACGAGAGTGC | |
| | 1621 | TTTATTGACT | GGCCCTTTGG | AGCCCCACAA | CGACGCGTAT | GCGATCGCCA | AGATCGCCGG | |
| | 1681 | TATCCTGCAA | GTTCAGGCGG | TTAGGCGCCA | ATATGGGCTG | GCGTGGATCT | CTGCGATGCC | |
| | 1741 | GACTAACCTC | TACGGACCCG | GCGACAACCT | CTCCCCGTCC | GGGTCGCATC | TCTTGCCGGC | |
| 35 | 1801 | GCTCATCCGT | CGATATGAGG | AAGCCAAAGC | TGGTGGTGCA | GAAGAGGTGA | CGAATTGGGG | |
| | 1861 | GACCGGTACT | CCGCGGCGCG | AACTTCTGCA | TGTCGACGAT | CTGGCGAGCG | CATGCCTGTT | |
| | 1921 | CCTTTTGGAA | CATTTTCGATG | GTCCGAACCA | CGTCAAACGTG | GGCACCGGCG | TCGATCACAG | |
| | 1981 | CATTAGCGAG | ATCGCAGACA | TGGTCGCTAC | GGCGGTGGGC | TACATCGGCG | AAACACGTTG | |
| | 2041 | GGATCCAAC | AAACCCGATG | GAACCCCGCG | CAAAC | TATTG | GACGTCTCCG | CGCTACGCGA |
| 40 | 2101 | GTTGGGTTGG | CGCCCGCGAA | TCGCACTGAA | AGACGGCATC | GATGCAACGG | TGTCGTGGTA | |
| | 2161 | CCGCACAAAT | GCCGATGCCG | TGAGGAGGTA | AAGCTGCGGG | CCGGCCGATG | TTATCCCTCC | |
| | 2221 | GGCCGGACGG | GTAGGGCGAC | CTGCCATCGA | GTGGTACGGC | AGTCGCTGG | CCGGCGAGGC | |
| | 2281 | GATGGCCTA | TGGGAGTATC | CCATAGCCTG | GCTTGGCTCG | CCCC | TACGCA | TTATCAGTTG |
| | 2341 | ACCGCTTTTCG | CGCCAGCTCG | CAGGCTCGCG | GCAGCATCCC | GTT | CAGGTCT | CCTCATGGTC |
| 45 | 2401 | CGGTGTGGCA | CGACCACGCA | AGCTCGAACC | GACTCGTTTC | CCAA | TTTCGC | ATGCTAATAT |
| | 2461 | CGCTCGATGG | ATTTTTTTCG | CAACGCGCGC | TTGATGGCTC | GTAACGTTAG | CACCGAGATG | |
| | 2521 | CTGCGCCACT | TCGAACGAAA | GCGCCTATTA | GTAACCAAT | TCAAAGCATA | CGGAGTCAAC | |
| | 2581 | GTGTATTATG | ATGTCGGTGC | TAACTCCGGC | CAGTTCGGTA | GCGCTTTTCG | TCGTGCAGGA | |
| | 2641 | TTCAAGAGCC | GTATCGTTTT | CTTTGAACCT | CTTTCCGGGGC | CATTTTCGCA | ACTAACCGCG | |
| 50 | 2701 | GAGTCGGCAT | CGGATCCACT | ATGGGAGTGT | CACCAGTATG | CCCTAGGCGA | CGCCGATGAC | |

- 44 -

2761 ACGATTACCA TCAATGTGGC AGGCAATGCG GGGGCAAGTA GTTCCGTGCT GCCGATGCTT
2821 AAAAGTCATC AAGATGCCTT TCCTCCCGCG AATTATATTG GCACCGAAGA CGTTGCAATA
2881 CACCGCCTTG ATTCGGTTGC ATCAGAAATT CTGAACCCTA CCGATGTTAC TTTCCTGAAG
2941 ATCGACGTAC AGGGTTTCGA GAAGCAGGTT ATCGCGGGCA GTAAGTCAAC GCTTAACGAA
3001 AGCTGCGTCG GCATGCAACT CGAACTTTCT TTTATTCCGT TGTACGAAGG TGACATGCTG
3061 ATTCAATGAAG CGCTTGAAC TGTCTATTCC CTAGGTTTCA GACTGACGGG TTTGTTGCCC
3121 GGATTTACGG ATCCGCGCAA TGGTCGAATG CTTCAAGCTG ACGGCATTTT CTTCCTGCGG
3181 GACGATTGAC ATAAATGCTT GCGTCGGCAC CCTGCCGTA TCCAAACGGG CGATCTGGTG
3241 AGCCGGCCTC CCGGGCACCT AATCGACTAT CTAAATTGAG GCGGCCCGCA CGTGCGGCAC
3301 GAACAGGTGG CCGGCTGCTA GCGTTACACA CGTCATGACT GCGCCAGTGT TCTCGATAAT
3361 TATCCCTACC TTCAATGCAG CCGTGACGCT GCAAGCCTGC CTCGGAAGCA TCGTCGGGCA
3421 GACCTACCGG GAAGTGAAG TGGTCCTTGT CGACGGCGGT TCGACCGATC GGACCCTCGA
3481 CATCGCGAAC AGTTTCCGCC CGGAACTCGG CTCGCGACTG GTCGTTTACA GCGGGCCCGA
3541 TGATGGCCCC TACGACGCCA TGAACCGCGG CGTCGGCGTA GCCACAGGCG AATGGGTACT
3601 TTTTITAGGC GCCGACGACA CCTCTACGA ACCAACCACG TTGGCCAGG TAGCCGCTT
3661 TCTCGGCGAC CATGCGGCAA GCCATCTTGT CTATGGCGAT GTTGTGATGC GTTCGACGAA
3721 AAGCCGGCAT GCCGGACCTT TCGACCTCGA CCGCCTCCTA TTTGAGACGA ATTTGTGCCA
3781 CCAATCGATC TTTTACCGCC GTGAGCTTTT CGACGGCATC GGCCCTTACA ACCTGCGCTA
3841 CCGAGTCTGG GCGGACTGGG ACTTCAATAT TCGCTGCTTC TCCAACCCGG CGCTGATTAC
3901 CCGCTACATG GACGTCGTGA TTTCCGAATA CAACGACATG ACCGGCTTCA GCATGAGGCA
3961 GGGGACTGAT AAAGAGTTCA GAAAACGGCT GCCAATGTAC TTCTGGGTTG CAGGGTGGGA
4021 GACTTGCAGG CGCATGCTGG CGTTTTTGAA AGACAAGGAG AATCGCCGTC TGGCCTTGCG
4081 TACGCGGTTG ATAAGGGTTA AGGCCGTCTC CAAAGAACGA AGCGCAGAAC CGTAGTCGCG
4141 GATCCACATT GGACTTCTTT AACGCGTTTG CGTCCTGATC CACCTTTCAA CCCCCTTCCG
4201 CGTGACGCGG CGCGCAGAGA GTGGTCGCAT ATCGCGTCAC TGTTCTCGTG CCAGTGCTTG
4261 GAAAGCGTCG AGCACTCTGG TTCGCGTTCT TGACGTTTCG CCCCCTTCCG AGAGGTAGCG
4321 TGTCACGTGA CTGAAGCCAA TGAGTGCAAC TCGGCGTCGC GAAAGGTTTC AGTCGCGGTT
4381 GAGCAAGACA CCGCAAGACT ACTGGAGTGC GTGCACAAGC GCCTCCAGCT CACGG

Seq. ID No.5

1 atgatcgctg tgatctggtc ggcggtgccc acaggaaccg tcgacttgct gacgatcacc
61 ttgtaccggt cgatgtatga cccaatgtcg tccgcaaccg agaagacgta cgtcagggtcc
121 gccgccccgc tttcaccat ggcggtcggt acggcgatga aaatgacgct cgcggtgctcg
181 attccgctgt gccggtcggt ggtgaagtca atcagcccgt tctcacggtt cctcgcaatc
241 aactcccaac ccgggctcga aaatcgggac actgcctgct agggagcaaat cgatcctggc
301 ctgatcgata tcgacacaga cgacatcggt gccgctatcc gcgagacagg cgcccgtgac
361 gaggcctaca tagcctga

Seq. ID No.6

1 M I A V I W S A V P T G T V D L S T I T L Y R S M Y D P M S
31 S A T E K T Y V R S A A P L S P M G V G T A M K M T S A C S
61 I P R C R S V V K S I S P F S R F L A I N S Q P G L E N R D
91 T A C E E Q I D L G L I D I D T D D I V A A I R E T G A R D
121 E A Y I A

- 45 -

Seq. ID No.7

1 gtgtcatctg ctccaaccgt gtcgggtgata acgatttcgc tgaacgatct cgagggattg
61 aaaagcaccg tggagagcgt tcgcgcgcag cgctatgggg ggcgaatcga gcacatcgtc
121 atcgacgggtg gatcgggcca cgccgtcgtg gagtatctgt ccggcgatcc tggctttgca
5 181 tattggcaat ctcagcccga caacgggaga tatgacgcga tgaatcagggt cattgcccat
241 tcgtcggggcg acctgtttgtg gtttatgcac tccacggatc gtttctccga tccagatgca
301 gtcgcttccg tgggtggaggc gctctcgggg catggaccag tacgtgattt gtgggggttac
361 gggaaaaaca acctgttcgg actcgacggc aaaccacttt tccctcggcc gtacggctat
421 atgccgttta agatgcggaa atttctgctc ggcgcgacgg ttgcgcatca ggcgacattc
10 481 ttcggcgcgt cgctggtagc caagtggggc ggttacgac ttgatttttg actcgaggcg
541 gaccagctgt tcatctaccg tgccgcacta atacggcctc ccgtcacgat cgaccgcgtg
601 gtttgcgact tcgatgtcac gggacctggg tcaaccacgc ccacccgtga gcactatcgg
661 accctgcggc ggctctggga cctgcatggc gactaccgcg tgggtggggc cagagtgtcg
721 tgggcttact tgctgtgaa ggagtacttg attcgggccc acctggcccg attcaacgcg
15 781 gtaaaagtct tgcgagcgaa gttcgccaga gttcgcgga agcaaaattc atag

Seq. ID No.8

1 V S S A P T V S V I T I S L N D L E G L K S T V E S V R A Q
31 R Y G G R I E H I V I D G G S G D A V V E Y L S G D P G F A
61 Y W Q S Q P D N G R Y D A M N Q G I A H S S G D L L W F M H
20 91 S T D R F S D P D A V A S V V E A L S G H G P V R D L W G Y
121 G K N N L V G L D G K P L F P R P Y G Y M P F K M R K F L L
151 G A T V A H Q A T F F G A S L V A K L G G Y D L D F G L E A
181 D Q L F I Y R A A L I R P P V T I D R V V C D F D V T G P G
211 S T Q P I R E H Y R T L R R L W D L H G D Y P L G G R R V S
25 241 W A Y L R V K E Y L I R A D L A A F N A V K F L R A K F A R
271 A S R K Q N S

Seq. ID No.9

1 gtgaagcgag cgcttataac agggatcacg gggcaggatg gttcctacct cgccgagcta
61 ctactgagca agggatacga gggtcacggg ctggttcgtc gagcttcgac gtttaacacg
30 121 tcgcgggatcg atcacctcta cgttgaccca caccaaccgg gcgcgcgctt gttcttgac
181 tatgcagacc tcatgacgg caccgggttg gtgacctgc tcagcagtat cgaccgggat
241 gaggtctaca acctcgcagc gcagtcccat gtgcgcgtca gctttgacga gccagtgc
301 accggagaca ccaccggcat gggatcgatc cgacttctgg aagcagtcgg cctttctcgg
361 gtggactgcc gggtctatca ggcttctcgt tcggagatgt tcggcgcatc tccgccaccg
35 421 cagaacgaat cgacgccgtt ctatccccgt tcgccatacg gcgcggccaa ggtcttctcg
481 tactggacga ctcgcaacta tcgagaggcg tacggattat tcgcagtgaa tggcatcttg
541 ttcaaccatg agtcccccg gcgcggcgag actttcgtga cccgaaagat cacgcgtgcc
601 gtggcgcgca tccgagctgg cgtccaatcg gaggtctata tgggcaacct cgatgcgatc
661 cgcgactggg gctacgcgcc cgaatatgtc gaggggatgt ggaggatgtt gcaagcgcc
40 721 gaacctgatg actacgtcct ggcgacaggc cgtggttaca ccgtacgtga gttcgtcaa
781 gctgcttttg accatgtcgg gctcgactgg caaaagcgcg tcaagtttga cgaccgctat
841 ttgcgtccca ccgaggtcga ttcgtagta ggagatgcc acaaggcgcc ccagtcactc
901 ggctggaaaag cttcggttca tactggtgaa ctgcgcgca tcatggtgga cgcggacatc
961 gccgcgttgg agtgcgatgg cacaccatgg atcgacacgc cgatgttgcc tgggtggggc
45 1021 agagtaagtt ga

- 46 -

Seq. ID No.10

1 VKRALITGITGQDGSYLAELLLSKGYEVHG
31 LVRRASTFNTSRIDHLYVDPHQPGARLFLH
61 YADLTDGTRLVTLSSLIDPDEVYNLAAQSH
5 91 VRVSFDEPVHTGDTTGMGSIRLLEAVRLSR
121 VDCRFYQASSSEMFGASPPPNESTPFYPR
151 SPYGA AKVFSYWTTRNYREAYGLFAVNGIL
181 FNHESPRRGETFVTRKITRAVARIRAGVQS
211 EYVMGNLDAIRDWGYAPEYVEGMWRMLQAP
10 241 EPDDYVLA TGRGYTVREFAQAAFDHVGLDW
271 QKR VKFDDRYLRPTEVDSL VGDAADKAAQSL
301 GWKASVHTGELARIMVDADIAALECDGTPW
331 IDTPMLPGWGRVS

Seq. ID No.11

1 gtgaagcgag cgcttataac agggatcacg gggcaggatg gttcctacct cgccgagcta
61 ctactgagca agggatacga gggtcacggg ctctgtctgc gagcttcgac gtttaacacg
121 tcgcggatcg atcacctcta cgttgaccca caccaaccgg gcgcgcgctt gttcttgac
181 tatgcagacc tctactgacg caccgggttg gtgaccctgc tcagcagtat cgaccggat
241 gaggtctaca acctcgcagc gcagtcctat gtgcgcgtca gctttgacga gccagtgc
20 301 accggagaca ccaccggcat gggatcgatc cgacttctgg aagcagtcg cctttctcgg
361 gtggactgcc gggtctatca gggttcctcg tcggagatgt tcggcgcatc tccgccaccg
421 cagaacgaat cgacgcggtt ctatccccgt tcgccatacg gcgcggccaa ggcttctc
481 tactggacga ctcgcaacta tcgagaggcg tacggattat tcgcagtga tggcatcttg
541 ttcaaccatg agtccccccg gcgcggcgag actttcgtga cccgaaagat cagcggtgcc
25 601 gtggcgcgca tccgagctgg cgtccaatcg gaggtctata tgggcaacct cgatgcgatc
661 cgcgactggg gctacgcgcc cgaatatgtc gaggggatgt ggaggatgtt gcaagcgctt
721 gaacctgatg actacgtcct ggcgacaggg cgtgggtaca ccgtacgtga gttcgtcaa
781 gctgcttttg accacgtcgg gctcgactgg caaaagcacg tcaagtttga cgaccgctat
841 ttgcgccccca ccgaggtcga ttcgctagta ggagatgccg acagggcggc ccagtcactc
30 901 ggctggaaaag cttcggttca tactgggtgaa ctgcgcgcga tcatggtgga cgcggacatc
961 gccgcgtcgg agtgcgatgg cacaccatgg atcgacacgc cgatgttgcc tggttggggc
1021 ggagtaagtt ga

Seq. ID No.12

1 VKRALITGITGQDGSYLAELLLSKGYEVHG
35 31 LVRRASTFNTSRIDHLYVDPHQPGARLFLH
61 YADLTDGTRLVTLSSLIDPDEVYNLAAQSH
91 VRVSFDEPVHTGDTTGMGSIRLLEAVRLSR
121 VDCRFYQASSSEMFGASPPPNESTPFYPR
151 SPYGA AKVFSYWTTRNYREAYGLFAVNGIL
40 181 FNHESPRRGETFVTRKITRAVARIRAGVQS
211 EYVMGNLDAIRDWGYAPEYVEGMWRMLQAP
241 EPDDYVLA TGRGYTVREFAQAAFDHVGLDW
271 QKHVKFDDRYLRPTEVDSL VGDAADRAAQSL
301 GWKASVHTGELARIMVDADIAASECDGTPW
45 331 IDTPMLPGWGGVS

- 47 -

Seq. ID No.13

1 gtgcgatggc acaccatgga tcgacacgcc gatgttgcc t gggtggggca gagtaagttg
 61 acgactacac ctgggcctct ggaccgcgca acgcccgtgt atatcgccgg tcatcggggg
 121 ctggtcggct cagcgctcgt acgtagattt gaggccgagg ggttcaccaa tctcattgtg
 5 181 cgatcacgcg atgagattga tctgacggac cgagccgcaa cgtttgattt tgtgtctgag
 241 acaagaccac aggtgatcat cgatcgccgc gcacgggtcg gcggcatcat ggcgaataac
 301 acctatcccg cggacttctt gtccgaaaac ctccgaatcc agaccaattt gctcgacgca
 361 gctgtcgccg tgcgtgtgcc gcggtctcctt ttctcgggtt cgtcatgcat ctaccggaag
 421 tacgctccgc aacctatcca cgagagtgtt ttattgactg gccctttgga gccaccaaac
 10 481 gacgcgtatg cgatcgccaa gatcgccggt atcctgcaag ttcaggcggg taggcgcaa
 541 tatgggctgg cgtggatctc tgcgatgccg actaacctct acggaccggg cgacaacttc
 601 tccccgtccg ggtcgcatct cttgccggcg ctcacccgtc gatatgagga agccaaagct
 661 ggtggtgcag aagaggtgac gaattggggg accggtactc cgcggcgcca acttctgcat
 721 gtcgacgacg tggcgagcgc atgctgttct cttttggaac atttcgatgg tccgaaccac
 15 781 gtcaacgtgg gcaccggcgt cgatcacagc attagcgaga tcgcagacat ggtcgctaca
 841 gcggtgggct acatcggcga aacacgttgg gatccaacta aaccgatgg aaccccgccg
 901 aaactattgg acgtctccgc gctacgcgag ttgggttggc gcccgcgaa cgcactgaaa
 961 gacggcatcg atgcaacggt gtcgtggtac cgcacaaatg ccgatgccgt gaggaggtaa

Seq. ID No.14

1 V R W H T M D R H A D V A W L G Q S K L T T T P G P L D R A
 31 T P V Y I A G H R G L V G S A L V R R F E A E G F T N L I V
 61 R S R D E I D L T D R A A T F D F V S E T R P Q V I I D A A
 91 A R V G G I M A N N T Y P A D F L S E N L R I Q T N L L D A
 121 A V A V R V P R L L F L G S S C I Y P K Y A P Q P I H E S A
 25 151 L L T G P L E P T N D A Y A I A K I A G I L Q V Q A V R R Q
 181 Y G L A W I S A M P T N L Y G P G D N F S P S G S H L L P A
 211 L I R R Y E E A K A G G A E E V T N W G T G T P R R E L L H
 241 V D D L A S A C L F L L E H F D G P N H V N V G T G V D H S
 271 I S E I A D M V A T A V G Y I G E T R W D P T K P D G T P R
 30 301 K L L D V S A L R E L G W R P R I A L K D G I D A T V S W Y
 331 R T N A D A V R R

- 48 -

Seq. ID No.15

5
10
15
1
61
121
181
241
301
361
421
481
541
601
661
721
781
841
901
961

gtgcatggc acaccatgga tgcacacgcc gatgttgccg ggttggggcg gagtaagttg
acgactacac ctgggctctt ggaccgcgca acgcccgtgt atatcgccgg tcatcggggg
ctggctcggt cagcgctcgt acgtagattt gaggccgagg ggttcaccaa tctcattgtg
cgatcacgcg atgagattga tctgacggac cgagccgcaa cgtttgattt tgtgtctgag
acaagaccac aggtgatcat cgatcgggcc gcacgggtcg gcggcatcat ggccaataac
acctatcccg cggacttctt gtccgaaaac ctccgaatcc agaccaattt gctcgacgca
gctgtcgccg tgcgtgtgcc gcggctcctt ttctcggtt cgatcatgcat ctaccggaag
tacgtctccg aacctatcca cgagagtgtt ttattgactg gccctttgga gccaccaaac
gacgcgtatg cgatcgccaa gatcgccggt atcctgcaag ttcaggcggg taggcgcaa
tatgggctgg cgtggatctc tgcgatgcg actaacctct acggaccgag cgacaacttc
tccccgtccg ggtcgcatct cttgccggcg ctcacccgtc gatatgagga agccaaagct
gggtgtgag aagaggtgac gaattggggg accggtactc cgcggcgcg acttctgcat
gtcgacgatc tggcgagcgc atgcctgtt cttttggaac atttcgatgg tccgaaccac
gtcaacgtgg gcaccggcgt cgatcacagc attagcgaga tcgcagacat ggtcgctacg
gcgggtgggt acatcgcgca aacacgttgg gatccaacta aaccgatgg aaccgcgcg
aaactattgg acgtctccgc gctacgcgag ttgggttggc gcccggaat cgcactgaaa
gacggcatcg atgcaacggt gtcgtgttac cgcacaaatg ccgatgccgt gaggaggtaa

Seq. ID No.16

20
25
30
1
31
61
91
121
151
181
211
241
271
301
331

VRWHTMDRHADVAWLGRSKLTTPGPLDRA
TPVYIAGHRGLVGSALVRRFEAEFTNLIV
RSRDEIDLTDRAATFDFVSETRPQVIIDA
ARVGGIMANNITYPADFLSENLRITNLDA
AVAVRVPRLFLGSSCIYPKYAPQPIHESA
LLTGPLEPTNDAYAI AKIAGILQVQAVRRQ
YGLAWISAMPTNLYGPGDNFSPSGSHLLPA
LIRRYEEAKAGGAEEVTNWGTGTPRRELH
VDDLASACFLLEHFDGPNHVNVTGVVDHS
ISEIADMVATAVG YIGETRWDP TKPDGTPR
KL LDVSA LREL GW RPRIAL KDGI DATVSWY
RTNADAVRR

Seq. ID No.17

35
40
45
1
61
121
181
241
301
361
421
481
541
601
661
721

atggattttt tgcgcaacgc cggttgatg gctcgtaacg ttagtaccga gatgctgcgc
cacttcgaac gaaagcgctt attagtaaac caattcaaag catacggagt caacgttgtt
attgatgtcg gtgctaactc cggccagttc ggtagcgctt tgcgtcgtgc aggattcaag
agccgtatcg ttctcttga acctcttctg gggccatttg cgcaactaac gcgcaagtcg
gcatcggtac cactatggga gtgtcaccag tatgccctag gcgacgccga tgagacgatt
accatcaatg tggcaggcaa tgcgggggca agtagttccg tgctgccgat gcttaaaagt
catcaagatg cctttcctcc cgcgaattat attggcaccg aagacgttgc aatacaccgc
cttgattcgg ttgcatcaga atttctgaac cctaccgatg ttactttcct gaagatcgac
gtacaggggt tcgagaagca gggtatcacg ggcagtaagt caacgcttaa cgaaagctgc
gtcggcatgc aactcgaact ttcttttatt ccgttgtagc aaggtgacat gctgattcat
gaagcgcttg aactgtcta ttccctaggt ttcagactga cgggtttgtt gcccggcttt
acggatccgc gcaatggctg aatgcttcaa gctgacggca tttcttccg tggggacgat
tga

- 49 -

Seq. ID No.18

1 M D F L R N A G L M A R N V S T E M L R H F E R K R L L V N
31 Q F K A Y G V N V V I D V G A N S G Q F G S A L R R A G F K
61 S R I V S F E P L S G P F A Q L T R K S A S D P L W E C H Q
91 Y A L G D A D E T I T I N V A G N A G A S S S V L P M L K S
121 H Q D A F P P A N Y I G T E D V A I H R L D S V A S E F L N
151 P T D V T F L K I D V Q G F E K Q V I T G S K S T L N E S C
181 V G M Q L E L S F I P L Y E G D M L I H E A L E L V Y S L G
211 F R L T G L L P G F T D P R N G R M L Q A D G I F F R G D D

Seq. ID No.19

1 atggattttt tgcgcaacgc cggcttgatg gctcgtaacg ttagcaccga gatgctgcgc
61 cacttcgaac gaaagcgctt attagtaaac caattcaaag catacggagt caacgttggt
121 attgatgctg gtgctaactc cggccagttc ggtagcgctt tgcgtcgtgc aggattcaag
181 agcgcgtatcg tttcctttga acctccttcg gggccatttg cgcaactaac gcgcgagtcg
241 gcatcggatc cactatggga gtgtcaccag tatgccctag gcgacgccga tgagacgatt
301 accatcaatg tggcaggcaa tgcgggggca agtagttccg tgctgccgat gcttaaaagt
361 catcaagatg cctttcctcc cgcgaattat attggcaccg aagacgttgc aatacaccgc
421 cttgattcgg ttgcatcaga atttctgaac cctaccgatg ttactttcct gaagatcgac
481 gtacaggggt tgcagaagca gggtatcgcg ggcagtaagt caacgcttaa cgaaagctgc
541 gtcggcatgc aactcgaact ttcttttatt cgttggtacg aaggtgacat gctgattcat
601 gaagcgcttg aacttgtcta ttccctaggt ttcagactga cgggtttggt gcccggttt
661 acggatccgc gcaatggtcg aatgcttcaa gctgacggca ttttcttcg tggggacgat
721 tga

Seq. ID No.20

1 M D F L R N A G L M A R N V S T E M L R H F E R K R L L V N
31 Q F K A Y G V N V V I D V G A N S G Q F G S A L R R A G F K
61 S R I V S F E P L S G P F A Q L T R E S A S D P L W E C H Q
91 Y A L G D A D E T I T I N V A G N A G A S S S V L P M L K S
121 H Q D A F P P A N Y I G T E D V A I H R L D S V A S E F L N
151 P T D V T F L K I D V Q G F E K Q V I A G S K S T L N E S C
181 V G M Q L E L S F I P L Y E G D M L I H E A L E L V Y S L G
211 F R L T G L L P G F T D P R N G R M L Q A D G I F F R G D D

- 50 -

Seq. ID No.21

1 atgactgcgc cagtgttctc gataattatc cctaccttca atgcagcggg gacgctgcaa
61 gcctgcctcg gaagcatcgt cgggcagacc taccgggaag tggaaagtgg ccttgtcgac
121 ggcggttcga ccgatcggac cctcgacatc gcgaacagtt tccgcccgga actcggctcg
5 181 cgactggctg ttcacagcgg gcccgatgat ggccctacg acgccatgaa ccgcggcgctc
241 ggcgtggcca caggcgaatg ggtacttttt ttaggcgccg acgacaccct ctacgaacca
301 accacgttgg ccaggttagc cgcttttctc ggcgaccatg cggcaagcca tcttgtctat
361 ggcgatgttg tgatgcgttc gacgaaaagc cggcatgccg gacctttcga cctcgaccgc
10 421 ctctattttg agacgaattt gtgccaccaa tcgatctttt accgccgtga gcttttcgac
481 ggcacgggcc cttacaacct gcgctaccga gtctgggcgg actgggactt caatattcgc
541 tgcttctcca acccggcgct gattaccgcg tacatggacg tcgtgatttc cgaatacaac
601 gacatgaccg gcttcagcat gaggcagggg actgataaag agttcagaaa acggctgcca
661 atgtacttct ggggtgcagg gtgggagact tgcaggcgca tgctggcggt tttgaaagac
721 aaggagaatc gccgtctggc cttgcgtacg cggttgataa gggtaaggc cgtctccaaa
15 781 gaacgaagcg cagaaccgta g

Seq. ID No.22

1 M T A P V F S I I I P T F N A A V T L Q A C L G S I V G Q T
31 Y R E V E V V L V D G G S T D R T L D I A N S F R P E L G S
61 R L V V H S G P D D G P Y D A M N R G V G V A T G E W V L F
20 91 L G A D D T L Y E P T T L A Q V A A F L G D H A A S H L V Y
121 G D V V M R S T K S R H A G P F D L D R L L F E T N L C H Q
151 S I F Y R R E L F D G I G P Y N L R Y R V W A D W D F N I R
181 C F S N P A L I T R Y M D V V I S E Y N D M T G F S M R Q G
211 T D K E F R K R L P M Y F W V A G W E T C R R M L A F L K D
25 241 K E N R R L A L R T R L I R V K A V S K E R S A E P

Seq. ID No.23

1 atgactgcgc cagtgttctc gataattatc cctaccttca atgcagcggg gacgctgcaa
61 gcctgcctcg gaagcatcgt cgggcagacc taccgggaag tggaaagtgg ccttgtcgac
121 ggcggttcga ccgatcggac cctcgacatc gcgaacagtt tccgcccgga actcggctcg
30 181 cgactggctg ttcacagcgg gcccgatgat ggccctacg acgccatgaa ccgcggcgctc
241 ggcgtagcca caggcgaatg ggtacttttt ttaggcgccg acgacaccct ctacgaacca
301 accacgttgg ccaggttagc cgcttttctc ggcgaccatg cggcaagcca tcttgtctat
361 ggcgatgttg tgatgcgttc gacgaaaagc cggcatgccg gacctttcga cctcgaccgc
421 ctctattttg agacgaattt gtgccaccaa tcgatctttt accgccgtga gcttttcgac
35 481 ggcacgggcc cttacaacct gcgctaccga gtctgggcgg actgggactt caatattcgc
541 tgcttctcca acccggcgct gattaccgcg tacatggacg tcgtgatttc cgaatacaac
601 gacatgaccg gcttcagcat gaggcagggg actgataaag agttcagaaa acggctgcca
661 atgtacttct ggggtgcagg gtgggagact tgcaggcgca tgctggcggt tttgaaagac
721 aaggagaatc gccgtctggc cttgcgtacg cggttgataa gggtaaggc cgtctccaaa
40 781 gaacgaagcg cagaaccgta g

- 51 -

Seq. ID No.24

1 M T A P V F S I I I P T F N A A V T L Q A C L G S I V G Q T
31 Y R E V E V V L V D G G S T D R T L D I A N S F R P E L G S
61 R L V V H S G P D D G P Y D A M N R G V G V A T G E W V L F
5 91 L G A D D T L Y E P T T L A Q V A A F L G D H A A S H L V Y
121 G D V V M R S T K S R H A G P F D L D R L L F E T N L C H Q
151 S I F Y R R E L F D G I G P Y N L R Y R V W A D W D F N I R
181 C F S N P A L I T R Y M D V V I S E Y N D M T G F S M R Q G
211 T D K E F R K R L P M Y F W V A G W E T C R R M L A F L K D
10 241 K E N R R L A L R T R L I R V K A V S K E R S A E P

Seq. ID No.25

1 gtggccagca gaagccccca ctccgctgcg ggtggttggc taattcttgg cggctccctt
61 cttgtggtcg gcgtggcgca tccggtagga ctgccggag gtgacgacga tgctggcggtg
121 gtgcagcagc cgatcgagga tgctggcggc ggtggtgtgc tcgggcagga atcgccccca
15 181 ttgttcgaag ggccaatgcg aggcgatggc cagggagcgg cgctcgtagc cggcagccac
241 gagccggaac aacagttgag tcccgggtgc gtcgagcggg gcgaagccga tctcgtccaa
301 gatgaccaga tccgcgcgga gcaggggtgc gatgatcttg ccgacggtgt tgcggccag
361 gccgcggtag aggacctcga tcaggtcggc ggcgggtgaag tagcggactt tgaatccggc
421 gtggacggca gcgtgcccgc agccgatgag caggtgactt ttgccgtac caggtgggccc
20 481 aatgaccgcc aggttctgtt gtgcccgaat ccattccagg ctcgacaggt agtcgaacgt
541 ggctgcggtg atcgacgatc cggtgacgtc gaaccgcgctc agggctcttg tgaccgggaa
601 ggctgcggcc ttgagacggt tggcggtgtt ggaggcatcg cgggcagcga tctcgccctc
661 aaccaacgtc cgcaggatct cctccggtgt ccagcgttgc gtcttggcga cttgcaacac
721 ctgcggcgcg ttgcggcgca ccgtggccag cttcaaccgc cgcagcgccg cgtcaaggtc
25 781 agcagccagc ggtgccgccc aggacggtgc caccggcttg gcagcggtgg tcatgaggcc
841 gtcccgtcgg tgggtgtgat cttgtag

Seq. ID No.26

1 V A S R S P H S A A G G W L I L G G S L L V V G V A H P V G
31 L A G G D D D A G V V Q Q P I E D A G G G V L G Q E S P P
61 L F E G P M R G D G Q G A A L V A G S H E P E Q Q L S P G V
91 V E R G E A D L V Q D D Q I R A E Q G V D D L A D G V V G Q
121 A A V E D L D Q V G G G E V A D F E S G V D G S V P A A D E
151 Q V T F A R T R W A N D R Q V L L C P N P F Q A R Q V V E R
181 G C G D R R S G D V E P V E G L G D R E G C G L E T V G G V
35 211 G G I A G S D L G L N Q R P Q D L L R C P A L R L G D L Q H
241 L G G V A A H R G Q L Q P P Q R R V K V S S Q R C R R G R C
271 H R L G S G G H E A V P S V V L I L

- 52 -

Seq. ID No.27

1 atgggctgcc tcaaaggtgg tgtcgtcgcc aatgttggtg ttccaacacc ggattatgtg
61 cgatttcgctg cccactatgg ctctggttcg gacttctgcc acggtgcgga tccgcaatcg
121 aagggcatcg tggagaacct ctgtgggtac gctcaggacg accttgcggt gccgctgctg
5 181 accgaagctg cgtagccgg tgagcaggtc gacctacgtg cctcaacgc ccaggcgcaa
241 ctatggtgctg ccgaggtcaa tgccacggtc cactcggaga tctgcgccgt gcccacgat
301 cgcttggttg acgagcgcac cgtcttgagg gagctgccct cgtcgggcc gacgatcggc
361 tcggggctcg tgcgcccgtaa ggtcgacggc ctctcgtgca tccgttacgg ctcagctcgt
421 tactcggtgc ctcagcggct cgtcgggtgc accgtggcgg tgggtggtcga tcatggcgcc
10 481 ctgatcctgt tggaaacctgc gaccggtgtg atcgtggccg agcacgagct cgtcagccca
541 ggtgaggtgt ccattcctcga tgaacactac gacggacca gacccgcacc ctcgctggtg
601 cctcgcccgaa aaacccaagc agagaaacga ttctgcgcac tgggaaccga agcgcagcag
661 ttctcgtcgt gtgctgctgc gatcggcaac acccgactga aatccgaact cgacattctg
721 ctcggccttg gcgcccggca cggcgaaacag gctttgattg acgcgctgcg ccgggcggtt
15 781 gcgtttcgcc ggttcgcgcg tgcgcagctg cgtcgcgacc tggccgcggg cgcggcgacc
841 ccacaacccc gcccgcggg cgacgcactc gtgctcgatc tggccaccgt cgagaccgcg
901 tcgttgaggg cctacaagat caacaccacc gacgggacgg cctcatgacc accgctgcca
961 agcgggtggc accgtcctcg gcggcaccgc tggctgctga ccttgacgcg gcgctgcggc
1021 ggttgaagct ggccacggtg cgcgcgaacg ccgccgaggt gttgcaagtc gccaagacgc
20 1081 aacgctggac accggaggag atcctgcgga cgttggttga ggccgagatc gctgcccgcg
1141 atgcctccaa caccgccaac cgtctcaagg ccgcagcctt cccggtcacc aagaccctcg
1201 acgggttcga cgtcaccgga tcgtcgatca ccgcagccac gttcgactac ctgtcgagcc
1261 tgggaatgat tcgggcacaa cagaacctgg cggtcattgg cccacctggt acgggcaaaa
1321 gtcacctgct catcggtgcg gggcacgctg ccgtccacgc cggattcaaa gtccgctact
25 1381 tcaccgcccg cgacctgatc gaggtcctct acccgggcct ggccgacaac accgtcggca
1441 agatcatcga caccctgctc cgcgcggatc tggctcatct ggacgagatc ggcttcgccc
1501 cgctcgacga caccgggact caactgttgt tccggctcgt ggctgcccgc tacgagcgcc
1561 gtcacctggc catcgctcgt cattggcctt tcgaacaatg ggggcgattc ctgcccgcg
1621 acaccaccgc cgccagcatc ctcgatcggc tgcgcacca cgcagcatc gtcgtcacct
30 1681 ccggcgagtc ctaccggatg cgccacgccc accacaagaa gggagccgcc aagaattag

Seq. ID No.28

1 M G C L K G G V V A N V V V P T P D Y V R F A S H Y G F V P
31 D F C H G A D P Q S K G I V E N L C G Y A Q D D L A V P L L
61 T E A A L A G E Q V D L R A L N A Q A Q L W C A E V N A T V
91 H S E I C A V P N D R L V D E R T V L R E L P S L R P T I G
35 121 S G S V R R K V D G L S C I R Y G S A R Y S V P Q R L V G A
151 T V A V V V D H G A L I L L E P A T G V I V A E H E L V S P
181 G E V S I L D E H Y D G P R P A P S R G P R P K T Q A E K R
211 F C A L G T E A Q Q F L V G A A A I G N T R L K S E L D I L
40 241 L G L G A A H G E Q A L I D A L R R A V A F R R F R A A D V
271 R S I L A A G A G T P Q P R P A G D A L V L D L P T V E T R
301 S L E A Y K I N T T D G T A S

- 53 -

Seq. ID No.29

1 MTTAAKPVAPSSAAPLAADLDAA LRRLKLA
31 TVRRNAAEVLQVAKTQRWTP EEILRTLVEA
61 EIAARDASNTANRLKAAAFPVTKTLDGFDV
91 TGS SITAATFDYLS SLEWIRAQQNLAVIGP
121 PGTGKSHLLIGCGHAAVHAGFKVRYFTAAD
151 LIEVLRYRGLADNTVGKI IDTLRLRADLVILD
181 EIGFAPLDDTGTQLLFRLVAAGYERRSLAI
211 ASHWPF EQWGRFLPEHTTAAS ILDRLLHHA
241 SIVVTSGESYRMRHADHKKGA AKN

Seq. ID No.30

1 gtgacgtctg ctccgaccgt ctcggtgata acgatctcgt tcaacgacct cgacggggtg
61 cagcgcacgg tgaaaagtgt gcgggcgcaa cgctaccggg gacgcatcga gcacatcgta
121 atcgacggtg gcagcggcga cgacgtggtg gcatacctgt ccgggtgtga accaggcttc
181 gcgtattggc agtccgagcc cgacggcggg cgggtacgac cgatgaacca gggcatcgcg
241 caegcategg gtgatctgtt gtggttcttg cactccgccg atcgtttttc cgggcccgac
301 gtggtagccc aggccgtgga ggcgctatcc ggcaagggac cgggtgtccga attgtggggc
361 ttcgggatgg atcgtctcgt cgggctcgat cgggtgcgcg gcccgatacc tttcagcctg
421 cgcaaattcc tggccggcaa gcaggttgtt ccgcatcaag catcgttctt cggatcatcg
481 ctggtggcca agatcgggtg ctacgacctt gatttcggga tcgccgccga ccaggaattc
541 atattgcggg ccgcgctggt atgcgagccg gtcacgattc ggtgtgtgct gtgcgagttc
601 gacaccacgg gcgtcggctc gcaccgggaa ccaagcgcg tcttcggtga tctgcgccgc
661 atgggcgacc ttcacgccc ctaccgcttc gggggaaggc gaatatcaca tgcctaccta
721 cgcggccggg agttctacgc ctacaacagt cgattctggg aaaacgtctt cagcggaatg
781 tcgaaatag

Seq. ID No.31

1 MTSAPT VSVITISFN DLDGLQRTVKS VRAQ
31 RYRGRI EHIVIDGGS GDDVVAYLSGCEPGF
61 AYWQSEPDGGRYDAMNQ GIAHASGDLLWFL
91 HSADRFSGPDVVAQAVEALSGKGPVSELWG
121 FGMDRLVGLDRVRGP I PFS LRKFLAGKQVV
151 PHQASF FGSSLVAKIGGYD LDFGIAADQEF
181 ILRAALVCEPVTIRCVLCEFD TTGVGSHRE
211 PS AVFGDLRRMGDLHRRYP FGGRRISHAYL
241 R GREFYAYNSRFWENVFTRMSK

- 54 -

Seq. ID No.32

1 gtgaagcgag cgctcatcac cggaatcacc ggccaggacg gctcgtatct cgcggaactg
61 ctgctggcca aggggtatga gggtcacggg ctcatccggc gcgttcgac gttcaacacc
121 tcgcggtatcg atcacctcta cgtcgacccg caccaaccgg gcgcgggct gtttctgcac
181 tatggtgacc tgatcgacgg aaccgggttg gtgacctgc tgagcaccat cgaacccgac
241 gaggtgtaca acctggcggc gcagtacac gtgcgggtga gcttcgacga acccgtgcac
301 accggtgaca ccaccggcat gggatccatg cgactgctgg aagccgttcg gctctctcgg
361 gtgcactgcc gcttctatca ggcgctcctc tcggagatgt tcggcgccctc gccgccaccg
421 cagaacgagc tgacgccgtt ctaccgcggc tcaccgtatg gcgcgcgcaa ggtctattcg
481 tactgggcca cccgcaatta tcggaagcg tacggattgt tcgccgttaa cggcatcttg
541 ttcaatcacg aatcacccgg gcgcgggtgag acgttcgtga cccgaaagat caccagggcc
601 gtggcacgca tcaaggccgg tatccagtc gaggtctata tgggcaatct ggatgcggtc
661 cgcgactggg ggtacgcgcc cgaatacgtc gaaggcatgt ggccgatgct gcagaccgac
721 gagcccgacg acttcgtttt ggcgaccggg cgcggtttca ccgtgcgtga gttcgcgcgg
781 gccgcgttcg agcatgccgg tttggactgg cagcagtacg tgaaattcga ccaacgctat
841 ctgcggccca ccgaggtgga ttcgctgatc ggcgacgcca ccaaggctgc cgaattgctg
901 ggctggaggg cttcgggtgca cactgacgag ttggctcgga tcatggtcga cgcggacatg
961 gcggcgctgg agtgcggaagg caagccgtgg atcgacaagc cgatgatcgc cggccggaca
1021 tga

Seq. ID No.33

1 M K R A L I T G I T G Q D G S Y L A E L L L A K G Y E V H G
31 L I R R A S T F N T S R I D H L Y V D P H Q P G A R L F L H
61 Y G D L I D G T R L V T L L S T I E P D E V Y N L A A Q S H
91 V R V S F D E P V H T G D T T G M G S M R L L E A V R L S R
121 V H C R F Y Q A S S S E M F G A S P P P Q N E L T P F Y P R
151 S P Y G A A K V Y S Y W A T R N Y R E A Y G L F A V N G I L
181 F N H E S P R R G E T F V T R K I T R A V A R I K A G I Q S
211 E V Y M G N L D A V R D W G Y A P E Y V E G M W R M L Q T D
241 E P D D F V L A T G R G F T V R E F A R A A F E H A G L D W
271 Q Q Y V K F D Q R Y L R P T E V D S L I G D A T K A A E L L
301 G W R A S V H T D E L A R I M V D A D M A A L E C E G K P W
331 I D K P M I A G R T

Seq. ID No.34

1 atgaggtcgg cccgtcgcgc tcggaacatc ttgcgtcgca acggcatcga ggtgtcgcgc
61 tactttgccg aactggactg ggaacgcaat ttcttgccgc aactgcaatc gcacgcgggc
121 agtgccgtgc tcgatgtcgg ggccaattcg gggcagtagc ccaggggtct gcgcggcgcg
181 gcttcgcggg gccgcacgt ctcgttcgag ccgctgcccg ggccctttgc cgtcttgacg
241 cgcagcgcc cccagggacc gttgtgggaa tgccggcgct gtgcgctggg cgatgtcgat
301 ggaaccatct cgatcaacgt cgcgggcaac gagggcgcca gcagttccgt cttgccgatg
361 ttgaaacgac atcaggacgc ctttccacca gccaaactac tgggcgcccc acgggtgccg
421 atacategac tcgatccgt ggctgcagac gttctgcggc ccaacgatat tgcgttcttg
481 aagatcgacg ttcaaggatt cgagaagcag gtgatcgcg gtggcgattc aacgggtgcac
541 gaccgatgcg tcggcatgca gctcgagctg tctttccagc cgttgtagca ggggtggcatg
601 ctcatccggc aggcgctcga tctcgtggat tcgttgggct ttacgctctc gggattgcaa
661 cccggtttca ccgacccccg caacggtcga atgctgcagg ccgatggcat cttcttcggg
721 ggcagcgatt ga

- 55 -

Seq. ID No.35

1 M R L A R R A R N I L R R N G I E V S R Y F A E L D W E R N
31 F L R Q L Q S H R V S A V L D V G A N S G Q Y A R G L R G A
61 G F A G R I V S F E P L P G P F A V L Q R S A S T D P L W E
91 C R R C A L G D V D G T I S I N V A G N E G A S S S V L P M
121 L K R H Q D A F P P A N Y V G A Q R V P I H R L D S V A A D
151 V L R P N D I A F L K I D V Q G F E K Q V I A G G D S T V H
181 D R C V G M Q L E L S F Q P L Y E G G M L I R E A L D L V D
211 S L G F T L S G L Q P G F T D P R N G R M L Q A D G I F F R
241 G S D

Seq. ID No.36

1 gtgaaatcgt tgaaactcgc tcgtttcatc gcgcgtagcg ccgccttcga ggtttcgcgc
61 cgctattctg agcgagacct gaagcaccag tttgtgaagc aactcaaadc gcgtcgggta
121 gatgtcgttt tcgatgtcgg cgccaactca ggacaatacg ccgccggcct ccgccgagca
181 gcatataagg gccgcattgt ctctgtcgaa ccgctatccg gaccgtttac gatcttgga
241 agcaaagcgt caacggatcc actttgggat tgccggcagc atgcgttggg cgattctgat
301 ggaacgggta cgatcaatat cgcaggaaac gccggtcaga gcagttccgt cttgcccag
361 ctgaaaagtc atcagaacgc ttttcccccg gcaaactatg tcggtaccca agaggcggtc
421 atacatcgac ttgattccgt gccgccagaa tttctaggca tgaacgggtg cgcttttctc
481 aaggctcgac ttcaaggctt tgaaaagcag gtgctcgccg ggggcaaadc aaccatagat
541 gaccattgag tcggcatgca actcgaactg tccttcctgc cgttgtagca aggtggcatg
601 ctcatctctg aagccctcga tctcgtgtat tccttgggct tcacgttgac gggattgctg
661 ctttgtttca ttgatgcaaa taatggtcga atgttgagg ccgacggcat ctttttccgc
721 gaggacgatt ga

Seq. ID No.37

1 M K S L K L A R F I A R S A A F E V S R R Y S E R D L K H Q
31 F V K Q L K S R R V D V V F D F T V G A N S G Q Y A A G L R
61 R A A Y K G R I V S F E P L S G P F T I L E S K A S T D P L
91 W D C R Q H A L G D S D G T V T I N I A G N A G Q S S S V L
121 P M L K S H Q N A F P P A N Y V G T Q E A S I H R L D S V A
151 P E F L G M N G V A F L K V D V Q G F E K Q V L A G G K S T
181 I D D H C V G M Q L E L S F L P L Y E G G M L I P E A L D L
211 V Y S L G F T L T G L L P C F I D A N N G R M L Q A D G I F
241 F R E D D

- 56 -

Seq. ID No.38

1 atggtgcaga cgaaacgata cgccggcttg accgcagcta acacaaagaa agtcgccatg
61 gccgcaccaa tgttttcgat catcatcccc accttgaacg tggctgcggt attgcctgcc
121 tgcttcgaca gcatcgcccg tcagacctgc ggtgacttcg agctgggtact ggtcgacggc
181 ggctcgacgg acgaaaccct cgacatcgcc aacattttcg cccccaacct cggcgagcgg
241 ttgatcattc atcgcgacac cgaccagggc gtctacgacg ccatgaaccg cggcgtggac
301 ctggccaccg gaacgtggtt gctctttctg ggcgcggacg acagcctgta cgaggctgac
361 accctggcgc ggggtggcgc cttcattggc gaacacgagc ccagcgatct ggtatatggc
421 gacgtgatca tgcgctcaac caatttccgc tggggtggcg ccttcgacct cgaccgtctg
481 ttgttcaagc gcaacatctg ccatcaggcg atcttctacc gcgcgggact cttcggcacc
541 atcgggtccct acaacctccg ctaccgggtc ctggccgact gggacttcaa tattcgctgc
601 ttttccaacc cagcgctcgt caccgctac atgcacgtgg tcgttgcaag ctacaacgaa
661 ttcggcgggc tcagcaatac gatcgctgac aaggagtgtt tgaagcggct gccgatgtcc
721 acgagactcg gcataaggct ggtcatagtt ctggtgcgca ggtggccaaa ggtgatcagc
781 agggccatgg taatgcgcac cgtcatttct tggcggcgcc gacgttag

Seq. ID No.39

1 M V Q T K R Y A G L T A A N T K K V A M A A P M F S I I I P
31 T L N V A A V L P A C L D S I A R Q T C G D F E L V L V D G
61 G S T D E T L D I A N I F A P N L G E R L I I H R D T D Q G
91 V Y D A M N R G V D L A T G T W L L F L G A D D S L Y E A D
121 T L A R V A A F I G E H E P S D L V Y G D V I M R S T N F R
151 W G G A F D L D R L L F K R N I C H Q A I F Y R R G L F G T
181 I G P Y N L R Y R V L A D W D F N I R C F S N P A L V T R Y
211 M H V V V A S Y N E F G G L S N T I V D K E F L K R L P M S
241 T R L G I R L V I V L V R R W P K V I S R A M V M R T V I S
271 W R R R R

Seq 40:

GATGCCGTGAGGAGGTAAAGCTGC

Seq 41:

GATACGGCTCTTGAATCCTGCACG